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PSYCHIATRIC STUDIES OF DELINQUENTS.

Physical, Mental, and Social Conditions of Prostitutes Detained or Quarantined in Extra-Cantonment Zones of Kansas and Kentucky.

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(EDITORIAL NOTE.—These studies will be run in five parts, which will appear in successive issues of Public Health Reports. Part I, A Psychiatric Study of Delinquent Women in Lansing, Kans., is printed in the present number; Parts IV and V will be published together.)

FOREWORD.

This series of articles presents the findings of three studies of the physical, mental, and social conditions of certain groups of women and girls who, during the war, were quarantined under health laws because of venereal infection, or, if detained upon a State charge, were found to be thus infected.

Part I, concerning delinquents in the extra-cantonment zone of Fort Leavenworth, Kans., was prepared by an officer of the Division of Scientific Research, United States Public Health Service. The study in Part II of a smaller group in Louisville, Ky., was made under authority of the special act of Congress, July 9, 1918, which created a division of venereal diseases in the United States Public Health Service and included among the duties of that division the "study, and investigation of causes, treatment, and prevention of venereal diseases." Part III represents the cooperation from the Children's Bureau of the Department of Labor, in a sociological interpretation of data of the Kansas investigation, especially data regarding the younger delinquents of the group. Part IV, the material of which is taken immediately from the Kansas investigation, draws also upon the experience of the United States Public Health Service for the important principle which is its thesis, namely, that the resources of psychiatry must be more widely drawn upon, and this in earliest years of childhood, to find and to correct tendencies in a child's behavior which promise to crystallize into antisocial habits and conduct.

The conclusions of the three investigators are grouped in Part V. These conclusions both indicate immediate problems and give grounds for assurance of their solution. The problems are of community

scope; the solution demands prompt and vigorous action by the various agencies whose object is the community's well-being. But it demands, too, more than this. The situation can not be met by work on the old, isolated, pigeonhole system. Whatever the point of departure, physical, mental, civic, or moral, an essential interdependence of activities and a necessity for fine teamwork are urgently illustrated in these studies of sexual delinquency.

The war emergency that compelled public recognition of prostitution as a menace to military fitness provided special measures for the control of this menace. The result was twofold: An extraordinary stimulation of earlier efforts to repress prostitution; a new realization of the conditions from which prostitution springs and of the evils which follow it. An aroused public saw certain too familiar "misdemeanors" in a new light; it saw them as an inevitable means of transmitting loathsome diseases. Further, people realized that these misdemeanors were more than individual matters; the offender was frequently the one offended against. The individual stood in a new perspective as the end result of social abnormalities long ignored if not deliberately concealed. History after history was traced steadily back to its source in bad heritage, neglected childhood, abnormal homes—joyless and without traditions; to inadequate teaching, unskilled work and an unstable work record, in dreary sequence reaching from generation to generation. Such facts, realized at last, could bring but one result—conviction that here was a great social menace not limited by the period of the war, not to be conquered by emergency measures only. Dealing with prostitution alone will not prove sufficient, serious as that problem was seen to be in all its forms. Public attention must focus upon the material, human and social, out of which prostitution is made; human material must be salvaged before it becomes wreckage; disease must be checked by eliminating its main source; and community conditions must be changed in order to fulfill such aims. In other words, out of the war crisis has come a call that voices with new urgency the old appeal for civic cleanliness and for the fine traditions of home and State and race and nation, and that indicates with unmistakable clearness some straight routes thitherward.

To present certain of these "routes" and the evidence of their necessity is the aim of this series. There is no attempt to emphasize one above another. Whether it be new provisions of medical resources for its sick, or far-reaching measures in recreation, housing, and hygiene for its children, each community must determine according to its own intelligent estimate of its needs. According to its response to the spirit of this after-war campaign, each community will interpret the recommendations offered in Part V for its attention—many and varied means to a common end. It must be noted

that because of their war-setting these studies focus especially upon women and girls. For the time, men as a group were particularly under military surveillance. But there is no intention to overlook the responsibility of men in creating the conditions analyzed any more than to underestimate their share in the great social movement already under way. The progress of the campaign depends upon its progress as applied citizenship, as a splendid cooperation regardless of sex or station.

PART I. A PSYCHIATRIC STUDY OF DELINQUENT WOMEN IN LANSING, KANS.

By WALTER L. TREADWAY, Passed Assistant Surgeon, United States Public Health Service.

Introduction.

A psychiatric study of a group of sexually delinquent women and girls was undertaken by the United States Public Health Service at the State Industrial Farm for Women at Lansing, Kans., in connection with the program of venereal disease control in the extra-cantonment sanitary zone of the State. This study continued over a period of a little more than three months, from June to October, 1918.

The Children's Bureau, United States Department of Labor, cooperated on request in this study, and assigned thereto an experienced field investigator who rendered valuable assistance in assembling sociological data.

The investigation was undertaken with the object of, first, determining among these sexual delinquents the presence of physical diseases and the prevalence of mental deficiency and psychopathic disorders; and, second, of studying the early, so-called normal, period of their lives with special reference to traits of personality which later resulted in antisocial conduct.

Obviously, recognition at an early age period of mental reactions that may be significant of later social maladaptation is of the utmost importance. For such reactions not only give warning of potential antisocial conduct, but also point to the immediate necessity of methods of training in order to counteract this tendency.

Regulations of the Kansas State Board of Health, based on State law, governing the control of infectious and contagious diseases, require the reporting of cases of venereal diseases and empower the board or city or county health officers representing the State Board of Health to quarantine persons infected with such diseases.¹ In the case of infected women, the place of quarantine may be either their home, under certain restrictions, or the State industrial farm.

The State industrial farm was established to care for women convicted of crime against the State of Kansas. It was created by

¹ Bulletin of Kansas State Board of Health, vol. 14, No. 3, March, 1918. Session Laws of Kansas, 1917, ch. 205.

legislative enactment in 1917, and was formally opened for the reception of prisoners on August 1 of that year, when female prisoners, who were formerly under the jurisdiction of the State penitentiary, were transferred to the industrial farm.

Although the industrial farm is located on the property of the State penitentiary, it is a separate and distinct institution, and like the other State institutions of Kansas is under the management of a State board of control. Parole and discharge of inmates convicted of crime are under the jurisdiction of the State board of control. Parole and discharge of those quarantined because of disease, however, are under the control of the health officer ordering such quarantine.

The treatment of venereal diseases in this institution was at the time of these investigations under the direction of an officer of the United States Public Health Service, who was also in charge of public health administration in the civil sanitary district surrounding Fort Leavenworth. Medical attention in all other forms of sickness was under the direction of the resident physician.

Information about each of the persons studied was obtained from official records, personal interview, interviews with the heads and employees of the institution and, in the case of those under 21 years of age, from a sociological investigation by a representative of the Children's Bureau, U.S. Department of Labor. The sociological data were obtained by personal visits to homes, interviews with members of the family and friends, examination of court records, interviews with police and other public officials, and an examination of the records of private and public social agencies.

Inmates of the Kansas State Industrial Farm comprise two classes of individuals: First, those quarantined because of a venereal disease, and second, those convicted of crimes against the State. Of this second group, only those were included in this study who were found infected or who had been promiscuous in their sexual relations. Evidence of such promiscuity was obtained from official records and from the confessions of individuals. The majority of the inmates of the farm had been taken from districts about the military reservations within the State. The group studied consisted of either former inmates of bawdyhouses, or of streetwalkers or prostitutes of a more or less surreptitious type, and are believed to be representative of that portion of the female population most liable to disseminate venereal diseases. This group numbered 206 in all. They ranged in age from 14 to 50 years. For convenience in this and the following parts they are frequently distinguished as follows: "Women," those over 21 years; and "girls," those under 21 years of age. Fifty-nine of these persons were Negroes; the remaining 147 were white.¹

¹ Fuller data regarding this group will be found in the sociological study, Part III.

1. Physical Examination of Delinquent Women and Girls.

Each of the 206 women and girls included in this study was given a physical examination. The examination consisted of measurements of height and weight, observance of the state of nutrition, the presence, or otherwise, of skin eruptions, scars, deformities, edema, glandular enlargements, and stigmata of degeneration. The condition of the digestive, circulatory, respiratory, and nervous systems was noted, with special reference to mucus membranes, blood pressure, pulmonary tuberculosis, the joints, and the presence or absence of symptoms of paralysis. Clinical diagnosis of the venereal diseases was in all instances confirmed by microscopic and serological tests.

The results of the physical examination, beyond determining the incidence of venereal-disease infection, have but slight relation to the conclusions arrived at in this study. As a matter of general interest, however, a brief outline of the physical findings is given.

NUTRITION.

It is realized that the nutrition of an individual may vary widely from an arbitrary standard without indicating abnormal conditions, and that between emaciation on the one hand and obesity on the other there is a great latitude in the conception of a "medium state of nutrition." According to Von Noorden, an individual should be considered stout when he weighs from 11 to 33 pounds above the average weight for his height, slightly obese if 33 to 55 pounds above the average, and extremely obese if more than 55 pounds above the average for his height.

According to Butler the average ratios of height to weight are as follows:

TABLE I.—*Standards of height and weight (Butler).*

Height in inches.	Weight in pounds.	Height in inches.	Weight in pounds.
60	115	68	155
61	120	69	160
62	125	70	165
63	130	71	170
64	135	72	175
65	140	73	180
66	145	74	185
67	150	75	.....

According to the Nylic graphic tables of height and weight the "medium state of nutrition" may vary from 9 pounds below to 9 pounds above the average weight for the corresponding height.

According to these tables an individual weighing 14 pounds less than the average of Butler is still in a "state of medium nutrition;" if from 14 to 33 pounds less he is under weight; and if more than 33

pounds less he is emaciated. On this basis the nutrition of the white and colored cases is given in the following table:

TABLE II.—*Relative state of nutrition of white and colored cases.*

	White.	Colored.
	<i>Per cent.</i>	<i>Per cent.</i>
Emaciated (33 or more pounds below average weight).....	0.07	2
Underweight (14 to 33 pounds below average weight).....	22.0	12
Medium nutrition (11 pounds above to 14 below average weight).....	52.0	47
Stout (11 to 33 pounds above average weight).....	12.0	18
Slightly obese (33 to 53 pounds above average weight).....	12.0	18
Extremely obese (55 or more pounds above average weight).....	1.0	3

CUTANEOUS.

Of the 147 white women, 4 had acne vulgaris, 2 syphilitic eruptions, and 5 were anemic. Of these latter, 2 gave a 4 plus Wasserman reaction, 1 presented the physical signs of pulmonary tuberculosis, 1 had an anal fistula, and 1 had gonorrhea. Of the 59 colored women, 2 had acne vulgaris and 1 had a syphilitic eruption.

Significant scars were observed in the cases of 4 white women. In 1, syphilitic scars were present over the tibial crest, and 3 had numerous scars over the arms and forearms, the result of the hypodermatic use of morphine and cocaine.

DEFORMITIES.

Two white women had functional lateral curvature of the spine, 1 a deformity of the wrist due to traumatism, and 1 the loss of distal phalanx of the index finger. Seven white women had a decided general syphilitic lymphatic enlargement; 8 showed enlarged cervical glands; 7 simple enlargement of the thyroid; and 1 an enlarged thyroid with exophthalmos without other signs of Graves's disease.

Of the colored women, 8 presented a decided general syphilitic lymphatic enlargement; 9 had enlarged cervical lymph nodes. Scars were present in 1 white and 1 colored woman, due to former suppuration of cervical lymph nodes.

The occurrence of stigmata of degeneration was noted. Among these stigmata were such deformities as malposition of the pinna, facial asymmetry, low and receding forehead, unduly high or low vaulted palate, marked malocclusion, deformities of the hands and feet, arms and legs, or abnormal distribution of the hair.

Of the total white cases observed, 60, or 41 per cent, had 2 or more stigmata of degeneration; 23, or 38.9 per cent, of the colored cases had 2 or more stigmata. For the whole group, 2 or more stigmata occurred in 83 persons, or practically 40 per cent of the group. Only cases with 2 or more stigmata of degeneration were recorded.

TABLE III.—*Stigmata of degeneracy in 147 white and 59 colored cases.*

	Number of stigmata.						Total showing 2 or more stigmata.
	2	3	4	5	6	7 or more.	
White.....	24	17	11	5	2	1	60
Colored.....	4	8	10	.....	1	.....	23

CONDITIONS OF THE TEETH AND TONSILS.

Dental use of toothbrush.—Of the 147 white observed, 57 used the toothbrush daily, 58 occasionally, and 32 never used it. Of the 59 colored cases, 10 used the toothbrush daily, 24 occasionally, and 25 never used it.

Defective teeth.—Of the 57 white persons who used the toothbrush daily, 26, or 45 per cent, had defective teeth, and 8, or 14 per cent, had pyorrhea. Of the 58 who used the toothbrush occasionally, 37, or 63 per cent, had defective teeth, and 9, or 15 per cent, had pyorrhea. Of the 32 who never used the toothbrush, 27, or 84 per cent, had defective teeth, and 11, or 34 per cent, had pyorrhea.

Of the 10 colored persons who used the tooth brush daily, 6, or 60 per cent, had defective teeth, and none had pyorrhea. Of the 24 who used the toothbrush occasionally, 16, or 66 per cent, had defective teeth, and 4, or 16 per cent, had pyorrhea. Of the 25 who never used it, 15, or 60 per cent, had defective teeth, and 5, or 20 per cent, had pyorrhea.

The number of defective teeth found among the group examined is shown in the following table:

TABLE IV.—*Dental conditions.*

	Number of defective teeth.									Total defective.	Pyorrhea.
	1	2	3	4	5	6	7	8	9 or more.		
White.....	32	17	7	10	10	2	4	.....	8	90	28
Colored.....	10	15	4	1	4	.....	.....	.....	3	37	9

The incidence of defective teeth was rather high for the group examined, but occurred in about equal proportions in both races. For example: Of the total cases examined, 90, or 61.2 per cent, of the white and 37, or 62.7 per cent, of the colored had defective teeth. The incidence of pyorrhea was higher among the white than among the colored race, being 20 per cent in the former and 15.2 per cent in the latter. Of the whole group, 127, or 61 per cent had defective teeth, and 37, or 18 per cent, had pyorrhea.

Missing teeth.—Of the total cases examined, 63, or 43 per cent, of the white cases, and 28, or 47 per cent, of the colored had no missing teeth. The condition in this respect for the women of both races is shown in the following table:

TABLE V.—Number of missing teeth.

	Number of teeth missing.										Total.
	None.	1	2	3	4	5	6	7	8	9 or more.	
White.....	63	18	22	13	8	5	3	2	1	10	82
Colored.....	28	10	8	2	1	4	1	.....	3	1	30

This record omits one colored case, which was not determined. Of the total cases examined, 55 per cent of the white and 51 per cent of the colored had one or more defective teeth, and of the whole group, 54.6 per cent required dental care.

Dental corrections.—The dental corrections among the group studied is shown in the following table:

TABLE VI.—Dental corrections.

	Number of fillings.										Crowns.					Bridges, total.	Plates.	
	1	2	3	4	5	6	7	8	9+	Total.	1	2	3	4	Total.		Upper.	Lower.
White.....	12	9	7	9	2	5	1	1	3	40	13	8	2	1	24	7	1	10
Colored.....	1	1	1	.....	.....	.....	.....	.....	.....	3	5	3	.....	.....	8	3	.....	.....

It will be observed from Table VI that 91, or 62 per cent, of the white, and 14, or 24 per cent, of the colored cases had some form of dental correction. Of the total cases examined, 51.2 per cent had dental corrections. Since the incidence of dental caries is about equal in both races, the above figures indicate that the white women consulted a dentist more frequently than the colored. Moreover, the table also suggests that the teeth in the colored race are less subject to decay and are, perhaps, more permanent than in the case of the white.

Tonsils.—Of the total white cases examined, 26, or 18 per cent, had slightly enlarged tonsils, 26, or 18 per cent, had enlarged and diseased tonsils, and 1, or 0.7 per cent, embedded and diseased tonsils. The conditions of last two groups require surgical treatment. The tonsils had been removed in 5, or 0.3 per cent, of the white cases examined. Of the total colored cases examined, 18, or 31 per cent, had slightly enlarged tonsils, and 7, or 12 per cent, had enlarged and diseased tonsils requiring surgical treatment. The total cases requiring surgical treatment of the tonsils constituted 16.5 per cent of the cases examined.

CONDITIONS OF THE CIRCULATORY SYSTEM.

Diseases of the heart.—Disorders and defects of the heart and associated conditions were found in the case of 14 women, 7 of each race. Specific details are set forth in the following table:

TABLE VII.—*Diseases of the heart and associated conditions.*

147 WHITE CASES.

Diseases of the heart.	Number of cases.	Associated condition.
Organic:		
Mitral disease.....	1	Embedded and diseased tonsils.
Do.....	1	Pyorrhea and pus tubes.
Do.....	1	Enlarged and diseased tonsils and adenoids.
Do.....	1	4 plus Wassermann.
Do.....	1	Rheumatism 3 years prior to admission.
Functional:		
Hemic murmur.....	1	Pale and anemic. 1 plus Wassermann.
Do.....	1	Pale and anemic. 4 plus Wassermann.
Total.....	7	

59 COLORED CASES.

Organic:		
Myocarditis, double cardiac murmur and uncompensated heart action.	1	4 plus Wassermann. Morphinism.
Mitral disease.....	1	4 plus Wassermann and arteriosclerosis.
Do.....	1	Pyorrhea.
Do.....	1	History of rheumatism fistula in ano.
Do.....	1	4 plus Wassermann.
Mitral disease and cardiac.....	1	4 plus Wassermann. Arteriosclerosis.
Hypertrophy.....	1	
Total.....	7	

One of the striking features of the study is the fact that no case of aortic valvular disease of the heart was observed. This is especially interesting in view of the results of the Wassermann tests.

Wassermann tests.—The results of the Wassermann tests are set forth in the following table.

TABLE VIII.—*Results of the Wassermann tests.*

	4 plus.	3 plus.	2 plus.	1 plus.	Negative.	Not determined.	Total.
White.....	46	17	8	7	63	6	147
Colored.....	19	6	1	4	26	3	59

As recorded in Table VIII, 46, or 31.2 per cent, of the white women and 19, or 32 per cent, of the colored women gave a 4 plus reaction and may therefore be classified as undoubtedly syphilitic. Further, in view of the mode of life followed by women of this group, it seems necessary to include also those giving a 3 plus reaction as definitely syphilitic. In other words, 63 white women and 25 colored women,

a total of 88, or 42.7 per cent, were diagnosed as infected with syphilis.¹ Negative Wassermann reactions were obtained in 63, or 42.8 per cent, of the white cases and in 26, or 44 per cent, of the colored. Total negative reactions, 89, or 43.2 per cent.

Arteriosclerosis.—In view of the fact that approximately two-fifths of these women had active syphilis, the existence of arteriosclerosis in a considerable degree might be expected under ordinary conditions. As a matter of fact, however, this condition was observed in but 2 colored women and in 3 white. In both cases of the former it was associated with a pronounced cardiac lesion. One of the 3 white women was a morphine addict, and 2 gave a 4 plus Wassermann reaction.

CONDITIONS OF THE RESPIRATORY SYSTEM.

Expansion.—The average chest expansion was 2.5 inches for the white and 2.27 for the colored women. Four white women had a chest expansion of but 1.5 inches. One of them had idiopathic asthma, 1 an enlarged thyroid with exophthalmos (the so-called Bryson sign), 1 had pyorrhea, and 1 apparently was otherwise physically normal. The chest expansion of 34 cases was 2 inches. One of these had the physical signs of tuberculosis of the lung. Three colored women had only 1.5 inches chest expansion. Of these, 1 had an organic heart lesion with pyorrhea, 1 had an uncomplicated heart lesion, and 1 had syphilis and diseased tonsils.

Nasal defects.—Of the white cases examined, 5 had post-nasal adenoids, 1 had a markedly deflected nasal septum, and 1 a "saddle" nose with perforated septum. The latter case gave a negative Wassermann reaction. One colored case had post-nasal adenoids.

Tuberculosis.—The physical signs of tuberculosis were present in 2 white women. Because of poor cooperation, specimens of sputum could not be obtained for microscopic examination. Consequently these cases were classed as indefinite tuberculosis.

CONDITIONS OF THE NERVOUS SYSTEM.

Vision.—The following visual defects were observed in white women: Refractive errors, 22; internal strabismus, 2; syphilitic retinochoroiditis, 2; blindness in one eye, 2; double cataract, 1; acute conjunctivitis, 2. Two women wore glasses for the esthetic effect only.

Of the colored women, 13 had errors of refraction; one was blind in one eye; one had syphilitic iritis; and one had a double cataract.

There was need of glasses in 12.9 per cent of the white women and in 20 per cent of the colored. Fully 37, or 17.9 per cent, of the

¹ See p. 1205 for statistics of gonorrhea.

entire group required special attention on account of visual disturbances.

Hearing.—Among the white cases, 8 had defective hearing, due in 5 cases to impacted cerumen; in 1 case to otitis media with mastoid abscess; in 1 to acute catarrhal otitis media; and in 1 to subacute otitis media. One colored woman had an old perforation of the eardrum, with defective hearing.

Other nervous conditions.—Of the white women, 1 had double congenital ptosis, 1 athetoid movements, 1 chorea, 3 an idiopathic tremor, 1 a congenital speech defect, 1 syringomyelia, and 1 hemiplegia. The latter was a case of focal paresis. Facial tic was observed in 1 colored woman.

CONDITIONS OF THE GENITO-URINARY SYSTEM.

*Gonorrhea.*¹—Gonorrhea was present in 93.6 per cent of all the women studied. The diagnosis of gonorrhea was confirmed by microscopical examination in each recorded case. Cases were considered doubtful when the organisms present were suggestive, but not morphologically characteristic, of gonococci.

TABLE IX.—*Diagnoses of gonorrhea.*

Race.	Positive.	Doubtful.	Negative.	Not diagnosed.
White.....	140 (95 per cent)	4	.....	3
Colored.....	53 (90 per cent)	1	..... 2	3

Vaginal mucous patches were observed in 1 white case, venereal warts in 1, procidentia in 1, and pus tubes in 8 cases. Only 1 colored woman had an infectious venereal sore.

Abortions and miscarriages.—A history of 1 abortion or miscarriage was obtained in 24 white and 13 colored cases, and of 2 or more abortions or miscarriages in 4 white cases, and 1 colored case. In addition to these, 1 colored woman gave a history of having had 2 stillbirths.

Surgical operations.—The histories of surgical operations referable to the genito-urinary system showed the following: Curretage of uterus, white, 7, colored, 4; laparotomies for the removal of pus tubes, white, 7, colored, 1. Thirteen white and 2 colored women were pregnant. Two white women had each given birth to a child while in the institution.

2. Mental Examination of Delinquent Women and Girls.

The mental examination of the inmates of the Kansas Industrial Farm for Women consisted first of a study of the family and personal history of each case, special attention being paid to histories

¹ For cases of syphilis see p. 1203.

of attacks of unconsciousness and convulsive seizures. Further, the appearance and conduct of each woman and girl was observed while under examination and during her period of detention in the institution; and an attempt was made to estimate their emotional stability by reviewing their conduct before admission to the institution and comparing it with that since commitment. Investigation was made also as to the presence or absence of illusions, hallucinations, or delusional trends. Each person was tested carefully for memory of recent and remote events as well as for retentive power and grasp of general and school knowledge. The intellectual level was finally determined by the Goddard revision of the Binet-Simon scale for measuring intelligence.

The results of gradings by this scale are shown in the following tables. The tables classifying white and colored compare chronological age with mental age and give totals and percentages in each age group, mental and chronological. In compiling these tables each individual was considered as of a chronological age at the time of examination, without regarding the nearness or remoteness of her next birthday. The mental age of each individual was considered to be that of the year most nearly approached by her mental grading. For example, if grading 10.2 years mentally, she was classed as 10 years old; if grading 10.6 years mentally, she was classed as 11 years old. All women responding correctly to all the questions in the Binet scale were graded as 12 plus years.

The tables show that colored women of the group reached a lower grade than did the white women; that is, 22.4 per cent of the white women and 32.7 per cent of the colored women graded 10 years or less, mentally. The average mental age for white women was 11.3 years, for colored women was 10.8 years.

TABLE X.—*Mental age of 147 white cases.*

Chronological age.	Mental age.						Total.
	8	9	10	11	12	12+	
15.....			1	1	2		4
16.....				1	2	2	5
17.....		1	2	5	3	3	14
18.....			2	8	6	2	18
19.....			1	6	1	6	14
20.....		2	1	3	6	2	14
21-30.....	4	4	9	10	16	20	63
31-40.....	1	1	2	2	3	1	10
41-50.....	1		1	2		1	5
Total.....	6	8	19	38	39	37	147
Per cent.....	4.1	5.4	12.9	25.9	26.5	25	100

TABLE XI.—*Mental age of 58 colored cases.*

Chronological age.	Mental age.							Total.
	7	8	9	10	11	12	12+	
14.....					1			1
15.....				1		1		2
16.....				0	1	0		1
17.....				1	0	1		2
18.....				1	1	0	2	4
19.....				0	3	2	0	5
20.....	1	0	0	0	1	1	1	4
21-30.....	0	3	1	4	3	7	10	28
31-40.....	0	0	1	4	1	2	1	9
41-50.....	1	0	1	0	0	0	0	2
Total.....	2	3	3	11	11	14	14	58
Per cent.....	3.4	5.2	5.2	1.90	1.90	24.1	24.1	100

¹ One case, not accurately graded, was not included in the above table.

MENTAL DISORDERS.

During the course of the mental examinations certain individuals were observed to have mental disorders that interfered with their adjustment to social standards, and ultimately brought them within the purview of the criminal or sanitary code. Such disorders were feeble-mindedness, feeble-minded epilepsy, idiopathic epilepsy, indefinite epilepsy, and constitutional psychopathic inferiority.

Other mental disorders were noted that were caused by alteration in the structure of the brain or were due to intoxications. These included general paralysis of the insane and toxic disorders due to the use of morphine. A few cases of mental disorder were placed in an unclassified group,¹ because the histories were too meager or the differential diagnosis was not plain.

All individuals grading below normal by the Binet-Simon scale were carefully investigated as to their educational opportunities, their grasp of school and general knowledge, and their power to use, as well as method of using, intelligence in relation to both earning capacity and social adjustments. Only the women whose grasp of knowledge was not in accord with their opportunities were classed as feeble-minded. According to purely statistical standards a number

¹ In the unclassified group an indefinite psychoneurosis was observed in a white woman 28 years old who had been a clandestine prostitute for years. She was committed because of syphilis. Consent to spinal puncture could not be obtained. The relation of the psychoneurosis to syphilis was therefore undetermined.

Another case, 46 years of age, had used morphine for a number of years, during which time she led a life of prostitution. It was not clearly determined whether her mental condition was an inherent defect or an acquired one.

Two other white cases of this group resembled dementia precox, but this disorder was not clearly defined. The two colored cases with psychic disturbances gave a history of long continued use of morphine. In one an acute delirium developed after admission to the institution. She had been quarantined because of syphilis. The other was committed for morphinism and had had an acute delirium while in a county jail. She had been a prostitute for years and was infected with syphilis.

of the cases not classed as feeble-minded in this study would have been so grouped. It must be realized, however, that in the diagnosis of mental deficiency the whole personality must be taken into account and that too great reliance can not be placed upon the results of formal psychological tests, unsupported by other data. Feeble-minded epileptics were so classed because epilepsy was found associated with enfeebled mental development. Epileptics were so classified only when epileptic convulsions were known to have occurred. The indefinite epileptics comprised a group of cases that gave histories of attacks of unconsciousness and whose temperament corresponded to that found in epilepsy. The women classed as constitutionally psychopathic inferiors showed well-defined psychopathic traits of character, although they were not insane in the legal interpretation of the word.

Of the entire group of 206 women, 114 were found affected with the mental disorders just enumerated; 92 were mentally normal—that is, without apparent mental disease. In only 5 cases was such mental deviation not found directly related to the practice of prostitution. In other words, 109 of these women—76 white, 33 colored—had a mental disorder preventing proper social adjustment and directly accountable for their life of prostitution. The incidence of mental disorders among the group studied is indicated in the following table:

TABLE XII.—*Incidence of mental disorders.*

	White.		Colored.		Per cent of entire group (206).
	Number.	Per cent.	Number.	Per cent.	
Total.....	79	53.7	35	59.3	55.3
Feeble-minded.....	37	25.1	21	35.3	28.2
Feeble-minded epileptic.....	4	2.7	1	1.7	2.4
Essential epilepsy.....	1	0.6	2	3.4	1.4
Indefinite epilepsy.....	5	3.4	0	0.0	2.4
Constitutional psychopathic inferiority.....	26	17.7	9	15.5	17.0
Organic psychoses (syphilitic).....	1	0.6	0	0.0	0.5
Toxic psychoses (morphinism).....	0	0.0	2	3.4	0.9
Unclassified.....	5	3.4	0	0.0	2.4

It is of further importance to emphasize the age and race incidence of these mental disorders. In both races the largest number of defects were found in women who were between 20 and 30 years of age. A slightly higher rate prevailed among white girls of 17 to 20 years than among colored girls of the same age.

TABLE XIII.—*Age-incidence of cases with mental disorders.*

79 WHITE CASES.

Chrono-logical age.	Feeble-minded.	Feeble-minded epileptic.	Essential epilepsy.	Indefinite epilepsy.	Constitutional inferiority.	Organic psychoses.	Toxic psychoses.	Unclassified.	Total.
15.....	1	1	0	0	1	0	0	0	3
16.....	0	0	0	2	2	0	0	0	4
17.....	3	0	0	0	4	0	0	1	8
18.....	5	0	0	0	4	0	0	0	9
19.....	3	0	0	0	2	0	0	0	5
20.....	2	0	0	1	4	0	0	1	8
21-30.....	17	3	1	2	8	0	0	2	33
31-40.....	4	0	0	0	1	0	0	0	5
41.....	2	0	0	0	0	1	0	1	4
Total..	37	4	1	5	26	1	0	5	79

34 COLORED CASES.

14.....	0	0	0	0	1	0	0	0	1
15.....	1	0	0	0	1	0	0	0	2
16.....	0	0	0	0	1	0	0	0	1
17.....	1	0	0	0	0	0	0	0	1
18.....	1	0	0	0	0	0	0	0	1
19.....	1	0	1	0	1	0	0	0	3
20.....	2	0	1	0	0	0	0	0	3
21-30.....	7	1	0	0	4	0	1	0	13
31-40.....	5	0	0	0	1	0	1	0	7
41.....	2	0	0	0	0	0	0	0	2
Total..	20	1	2	0	9	0	2	0	34

The relative infrequency among prostitutes of mental disorders due to syphilis has been the subject of considerable speculation.¹ Some authorities claim that syphilis is less likely to attack the central nervous system of prostitutes because of the high incidences of degenerative mental disorders already existing among these persons. They consider prostitutes the counterpart of vagabondage and tramp life among men. It is probable that the age of the group studied accounts for the low incidence of syphilitic nervous diseases, especially paresis, among them. Among the whole group, 15, or 10 per cent, of the white and 11, or 18.8 per cent, of the colored were 30 or more years of age. At or below that age paresis is less likely to occur.

Recapitulation.

The findings of physical and mental examinations may be briefly summarized. The prostitutes of this group were usually well nourished. Tuberculosis was uncommon; diseases of the skin were infre-

¹ One case of syphilitic brain disease was observed in a woman 43 years of age who had been a public prostitute for more than 20 years. Little is known of her early life except that she had been an inmate of a correctional institution. She was always craving excitement and drank a good deal. At one time she had accumulated a good deal of money, and had considerable influence in certain political circles and in the underworld. For a year or more prior to her commitment she squandered her money, lost what influence she had had in the community, and practiced sexual perversions. She was committed on a charge of maintaining a house of ill fame. In this case the mental disorder was the result of syphilis contracted in the course of her life as a prostitute.

quently observed, but the absence of the latter is no criterion of the absence or presence of syphilis.

The group examined showed no appreciation of the principles of personal hygiene. The neglect of the teeth and indifference to dental service, impacted earwax, the neglect of tonsils and eyes, all such findings indicate the need for medical inspection even from the very earliest grades of schools, together with an improved system of making principles of personal hygiene vivid to the individual child and a routine which shall result in fixed habit.

Syphilis was found of frequent occurrence; yet, notwithstanding, syphilitic heart diseases and other involvements of circulatory and nervous systems and mental diseases due to syphilis were not common. To some extent this fact is explainable on the grounds of the relative youth of the women examined. Gonorrhea was found in 93.6 per cent of these delinquent women. The presence of venereal diseases in this group was directly related to a long series of antisocial actions, themselves growing out of abnormal living conditions.

The intellectual level was low and varied among the group studied. This difference in mental attainment indicates the importance of individual attention in any school for special training.

(Part II of these studies, A Study of Physical and Mental Conditions of 100 Delinquent White Women in Louisville, Ky., will appear in the next issue of Public Health Reports.)

ABEYANT HOSPITALS FOR EMERGENT EPIDEMICS.

By R. L. DESAUSSEURE, Commissioner of Health, Rome, Ga.

The Need of a Knockdown Hospital.

Pandemics of influenza in the last two years have brought about unusual conditions throughout the country. In every little hamlet it has become necessary to speedily extemporize emergency hospitals, and in larger centers provision has been necessary to take care of the overflow from the hospitals already established. These temporary hospitals have been installed in the halls of fraternal organizations, in vacant dwellings, in office lofts, or in any suitable place available. This helter-skelter method of organizing a hospital results in confusion, waste, general dissatisfaction, and low-grade efficiency. Experience with hastily constructed hospitals of this sort in Maine, Pennsylvania, and Georgia has convinced me of the need of some system in communities presided over by a health officer for rapid and effective realization of temporary hospitals when the need for such arises. And this need is not infrequent. Pandemics such as those that we have recently passed through, fires, floods, and sudden disaster, all